



Abstract S10 Figure 1. Adult ROC curve

REFERENCES

Kraemer, R *et al* 2006, *Respiratory Research*. Lee, T W R *et al* 2003, *Journal of Cystic Fibrosis*.

S11 FEASIBILITY OF CONDUCTING COMPLEX PHYSIOLOGICAL MEASUREMENTS IN LONDON PRIMARY SCHOOLS: THE SIZE & LUNG FUNCTION IN CHILDREN (SLIC) STUDY

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Despite recognised ethnic differences in lung function, most reference ranges are based on White subjects. Ethnic minorities comprise 40% of the London population, which impacts on healthcare provision. Even when available, selection of appropriate equations is complicated by the increase in admixed populations and complexities of defining ‘ethnicity’. As part of the Wellcome Trust SLIC study (www.ucl.ac.uk/slic) to determine the extent to which body shape, size and composition contributes to ethnic differences in lung function, we examined the feasibility of conducting complex physiological measurements in a multi-ethnic population of London primary school children.

Methods 14 London schools participated in the study. Science workshops were presented one week prior to commencing assessments. Consent forms and information packs were distributed to all children. All children with parental consent were eligible and were categorised into 4 broad ethnic groups: White; Black; South-Asian (Indian subcontinent) and Other/mixed. Assessments were performed at school in 5–11 year-old children and included detailed anthropometry, 3D photonic scan for body shape; body composition; spirometry and saliva samples (cotinine and DNA analysis).

Results Parental consent for anthropometry and spirometry was obtained in 54% of those approached. Amongst these, 88% and 96% provided specific consent for DNA samples and access to GP records respectively (Table 1). Assessments were performed in 2175 children (mean (SD)age: 8.22(1.63); 34%White; 29% Black; 25%South-Asian; 12%Other/mixed ethnicities), 1045 (48%) of whom had follow-up assessments a year later. Preliminary analysis indicates: 18% had chronic respiratory illness or

Abstract S11 Table 1. Consent, asthma status & spirometry success rates of study population

	White	Black	S-Asian	Other/mixed
Total Tested (% boys)	742 (49.7%)	629 (43.6%)	540 (48.7%)	264 (46.6%)
DNA consent	89.3%	84.0%	85.8%	92.2%
GP record access consent	97.1%	93.8%	93.6%	97.4%
Asthma: ever	11.6%	11.1%	8.9%	19.7%
Asthma: current	5.5%	4.6%	5.6%	7.2%
Totalspirometry ^a	533 (71.8%)	435 (69.2%)	411 (76.1%)	195 (73.9%)

Data presented as %.

Abbreviations: DNA: Deoxyribonucleic acid (for genetic ancestry); GP: General Practitioner; Current asthma: defined as those having symptoms and/or asthma medication over the past 12 months;

^abased on data from healthy children and after exclusions from poor health and poor performance.

acute symptoms at time of test. 12% children had a diagnosis of ‘asthma ever’, with 6% having current asthma (Table 1). Acceptable spirometry¹ was obtained from 1574(72%) healthy children.

Summary Conducting a field study to undertake complex physiological measurements is feasible even in young children. However, the relatively high prevalence of chronic or acute respiratory disease at time of testing in this age group, combined with exclusions due to technically unsatisfactory spirometry means that results from ~30% of children may be excluded if analysis of results is to be based on a ‘healthy’ population. Such factors must be accounted for when designing respiratory field studies to ensure adequate sample size to reach definitive conclusions.

REFERENCE

1. Kirkby *et al*. *Pediatr Pulmonol* 2008.

Interstitial lung disease: clinical

S12 INTERSTITIAL LUNG DISEASE MULTIDISCIPLINARY DISCUSSION: SIX YEARS OF DATA FROM A TERTIARY SERVICE

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Introduction Accurate diagnosis in Interstitial Lung Disease (ILD) is vital in optimising patient management. An integrated approach involving a multidisciplinary team (MDT) of physicians, radiologists and pathologists is strongly advised in ATS/ERS guidelines.¹ This has been shown to improve diagnostic confidence.² Consensus diagnosis post multidisciplinary team discussion often differs from that reached by individual clinicians. Our centre, which provides a tertiary interstitial lung disease service in the North of England, implemented multidisciplinary discussion in 2005. Our patient cohort is larger than series previously presented at both national and international respiratory meetings. Literature search also did not identify any published data with either an equal or greater patient population.

Aims To review interstitial lung disease MDT outcomes and to determine if discussion resulted in a change of diagnosis and whether this impacted on subsequent patient management.

Methods Retrospective review of both patient clinical notes and MDT outcomes from 2005 to 2013 was performed. Data from